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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/041,824	01/07/2002	Deeb Daoud	22868.61	4564

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EXAMINER

COLILLA, DANIEL JAMES

ART UNIT	PAPER NUMBER
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2854

DATE MAILED: 08/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/041,824

Applicant(s)

DAOUD, DEEB

Examiner

Dan Colilla

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 12, 16, 17, 19/1 20, 22 and 24 is/are rejected.
- 7) ☒ Claim(s) 5-11, 13-15, 18, 19/9, 21, 23 and 25 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 January 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The reference numeral 108 (as mentioned on page 15, line 8) cannot be found in the drawings .

Specification

2. The disclosure is objected to for the following informalities:

On page 15, line 5, applicant uses reference numeral in association with lever 102.

However, in Figures 4-5, it appears to be pointing to a hand.

Claim Objections

3. Claims 1-25 are objected to because of the following informalities:

In claims 1 and 24, applicant refers to a distal side, however, applicant has not clearly defined what the distal side is. Appropriate correction is required.

Also in claims 1 and 24, applicant is attempting to define the keyboard by reciting limitations involving the placement of a user's hands and fingers in an intended use of the keyboard. However since a user's hands and fingers may not always be in the same position or may not be present at all, the structure of the keyboard cannot accurately be defined by such limitations.

In claim 9, it appears that --said-- should come before "distal row."

In claim 10, line 1, it appears that "raiser" should actually be --riser--.

In claim 13, line 2, it is not clear what applicant intends to mean by the term “upbridging.”

In claim 19, line 4, “said upper level” has no proper antecedent basis in the claims.

4. Claim 18 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim may not depend from another multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claim 18 has not been further treated on the merits.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 17/4, 17/16, 22/20 and 22/9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 17/4, “said horizontal level” has no antecedent basis in the claims.

In claim 17/16, “the two parts” and “said three of said plurality of surfaces” have no antecedent basis in the claims.

In claim 22/20, “said leverage system,” “said most distal row,” “said middle row,” “said riser” and “said upper level” have no antecedent basis in the claims.

In claim 22/9, “said leverage system,” and “said upper level” have no antecedent basis in the claims.

Due to the nature of the 112 rejection, prior art can not be accurately applied to claims 17 and 22. Once the 112 problems are overcome, any relevant prior art will then be applied.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-2 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Loke.

With respect to claim 1, Loke discloses a keyboard including a plurality of surfaces at different elevations as shown in Figure 4 of Loke. Figure 2 of Loke shows that the surface with the highest elevation 7 is used to support the palm. Figure 3 of Loke shows keys 8-10 located in a surface on a distal side. Another surface 5 is shown in Figure 3. The user's thumbs could be placed on this surface.

With respect to claim 2, surface 7 has no keys as shown in Figure 3.

With respect to claim 16, the surface containing keys 8-10 is a horizontal surface.

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9. Claims 1, 3-4, 12, 19/1 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Adam et al.

With respect to claim 1, Adam et al. discloses a keyboard including a surface of highest elevation 2a, 2b for supporting the palms as shown in Figure 2 of Adam et al. Adam et al. further discloses a surface 11a on a distal side that contains keys in key group 3.

With respect to claim 3, Figure 1 of Adam et al. shows three surfaces on a distal side as shown in Figure 1. One surfaces is 103a, 103b, a second surface is the surface containing key groups 20a and 20b and a third surface is the surface containing key groups 21a, 21b. These surfaces are arranged in rows.

With respect to claim 4, the three surfaces are each divided into two parts. As shown in Figure 1 of Adam et al.

With respect to claim 12, the surface of the highest elevation is divided into two portions 2a and 2b as shown in Figure 1 of Adam et al.

With respect to claim 19/1, at least a portion of the surface 103a, 103b is located at the same elevation as the surface 2a, 2b.

With respect to claim 20, the entire keyboard can be moved horizontally on a table to provide better positioning for the user.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Adam et al. in view of Hayashi et al.

Adam et al. discloses the claimed keyboard except for the surface adapted to move in an inwardly and outwardly directions. Adam et al. discloses a keyboard including a surface of highest elevation 2a, 2b for supporting the palms as shown in Figure 2 of Adam et al. Adam et al. further discloses a surface 11a on a distal side that contains keys in key group 3. Hayashi et al. teaches a keyboard with two halves that can move inwardly and outwardly as shown in Figures 1 and 3A of Hayashi et al. It would have been obvious to combine the teaching of Hayashi et al. with the keyboard disclosed by Adam et al. for the advantage of adjusting a keyboard to a comfortable position for the user and for stowing the keyboard in a compact form when it is not in use.

Allowable Subject Matter

12. Claims 5-11, 13-15, 19/9, 21, 23 and 25 are objected to as being dependent upon a rejected

base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

13. The following is a statement of reasons for the indication of allowable subject matter: Claims 5-8 have been indicated as containing allowable subject matter because the prior art of

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record does not teach the combination of a keyboard including the three surfaces such that they are each provided with alphanumeric keys in a standard keyboard layout.

Claims 9-11 have been indicated as containing allowable subject matter because the prior art of record does not teach the combination of a keyboard including the three surfaces such that the most distal row is the lowest row and the middle row is raised by a riser above the distal row.

Claims 13-15 have been indicated as containing allowable subject matter because the prior art of record does not teach the combination of a keyboard including a detachable bridge bridging the gap between the two portions.

Claim 21 has been indicated as containing allowable subject matter because the prior art of record does not teach the combination of a keyboard including the recited leverage system.

Claim 23 has been indicated as containing allowable subject matter because the prior art of record does not teach the combination of a keyboard including at least one key formed on surfaces formed between the plurality of surfaces of different elevations.

Claim 25 has been indicated as containing allowable subject matter because the prior art of record does not teach the combination of a keyboard including the recited leverage system.

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Gambaro, Vulk, Jr. and Niklsbacher are cited to show other examples of ergonomic keyboards with rows of different elevations.

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15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Colilla whose telephone number is (703) 308-2259. The examiner can normally be reached M-F, 8:30-5:30. Faxes regarding this application can be sent to (703) 746-4405.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached at (703)305-6619. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

August 20, 2003



Dan Colilla
Primary Examiner
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